

The regulatory approach towards coexistence in Flanders, Belgium

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Abstract

Since the EU decided to introduce labelling thresholds for the adventitious presence of GM material in non-GM products, safeguarding consumer's choice, it created the necessity for the coexistence of GM and non-GM crops, mainly to protect non-GM farmers for any economic loss due to this GM presence. Flanders, the north of Belgium, created a decree to address coexistence, dealing with mandatory training as well as notifications to the authorities, neighbouring farmers, owners and contractors, furthermore key principles of liability, a compensation fund and the coexistence committee, GM-free zones, record keeping, supervision and control. Implementing orders are in preparation.

1 Introduction

Belgium is a federal state in the heart of Europe and consists of three regions: Flanders, the Dutch speaking northern part of the country, Wallonia, the French speaking south, and in the centre Brussels-Capital Region. All matters directly related to agriculture come within the scope of the regional authorities, apart from food safety, which is still a federal policy issue. The GMO legislation related to human and animal health and the environment is also a federal competence and therefore based on the same policy for the whole country. The coexistence of GM crops with non-GM crops, however, is exclusively seen as a socio-economic matter. Therefore coexistence is a part of agricultural policy and no longer an environmental biosafety issue. In Belgium, agriculture is a regional competence and evidently also coexistence is regulated by the regions.

In 2007 about 45.4 % of the total surface area in Flanders was designated for agriculture (622,133 ha). 58 % of the arable land is used for feed crops. The farms continuously scale up: the average area to be cultivated per farm in 2007 is 19.5 ha, an increase by 37.3% since 1997 (Platteau et al. 2008). In Wallonia, the average size is even bigger, amounting to 46.7 ha. Flanders covers an area of 13,522 km² and has about 6 million inhabitants (Smets et al. 2004).

The Flemish organic farming sector includes 230 farms and represented 3,492 ha in 2008, or 0.6% of the total arable land in Flanders (Samborski & Van Bellegem 2009).

Obviously Flanders' agricultural policy is essentially European based. Flanders is able to shape its policy in the light of what is decided by the European Union authorities. Since coexistence is left to the Member States' subsidiarity, Flanders decided to create a legislation to manage the growth of genetically modified crops within its territory. The legislation will contain a decree (framework of basic principles), an order of the Flemish Government with implementing rules, valid for all crops, and for each relevant crop an additional order of the Flemish Government with the related crop-specific rules.

A recent scientific case study (Devos 2008; Devos et al. 2007; Devos et al. 2008) focused on the feasibility of isolation perimeters around GM maize in Flanders. Different scenarios were simulated by using real statistical data on six selected areas (squares of 25 km²), scattered all over Flanders and representative of the Flemish maize cultivation area. It concluded that the implementation of wide isolation perimeters is unfeasible, especially in areas where maize is grown on a large part of the agricultural area. Maize fields are so close to each other that each GM maize field interferes with many non-GM maize fields and their corresponding farmers. They showed for example that as soon as 10% of the maize area with a high maize share in the cropped area is randomly planted with GM maize, more than $65.8 \pm 3.3\%$ of the non-GM maize fields, involving $77.0 \pm 4.4\%$ of all non-GM maize farmers, fall within a perimeter of 200 m, which makes it very difficult to spatially isolate GM maize fields from non-GM ones. The clustering of GM maize fields is approximately eight times more efficient.

2 Methods

The first discussions on the creation of a draft legislation on coexistence measures started more than five years ago, after finishing a study on the possibility, the acceptance and the boundary conditions of the growth of genetically modified crops in Flanders (Vrijens et al. 2004).

To draft the coexistence legislation and after many discussions on the political level, several procedural steps have to be taken, including advice from several Advisory Boards (representing the agricultural and environmental sectors), the State Council and a compulsory notification to the European Commission as foreseen in Directive 98/34/EC.

At the end, the final package of Flemish legislation will be a political agreement, based on various scientific studies, consultations with stakeholders, and information gathered from COEX-NET, GMCC and the other European Member States (European Commission 2009; Devos et al. 2009).

3 Results

Key Principles of the Decree

The Flemish decree of 3 April 2009 (Decreet van 3 april 2009 houdende de organisatie van co-existentie van genetisch gemodificeerde gewassen met conventionele gewassen en biologische gewassen), approved by the Flemish Parliament and the framework of the coexistence legislation, consists of both ex ante regulations and ex post (liability) rules. The decree describes the key principles of the administrative procedure, conditions to be fulfilled by GM growers, neighbouring farmers and contractors, the creation of a coexistence committee and a compensation fund, GM-free zones, record keeping, liability, monitoring, supervision, control and administrative fines.

Firstly, the decree foresees some mandatory actions to be taken by the GM growers. Farmers and contractors who want to work with GM crops need to follow a specific training. Additionally, GM farmers are requested to notify their intentions to grow a GM crop to the competent authority, to neighbouring farmers within the notification distance, to the owner of the plot and to other persons, e.g. mediating contractors, intervening in the crop.

Neighbouring farmers within the isolation distance (per definition smaller than the above-mentioned notification distance) are given the right to object to the GM crop on the basis of a reasoned economic interest. Since GM crops, approved within the EU, are considered being safe, no other interests like health or environmental concerns will be taken into account. The objections are examined and approved by the coexistence committee.

To finalise the notification procedure prior to sowing or planting, GM farmers pay for each GM crop they will grow a contribution to the compensation fund. The amount of the contribution will be crop specific and proportional to the size of the plot (per hectare) but has not been fixed yet.

The compensation fund was created to indemnify possible economic damage to conventional and organic harvests due to adventitious mixing with a GM crop grown within the notification distance of this GM crop. Economic damage is defined as the difference in market price between a non-GM and a GM-labelled harvest product (above the 0.9% labelling threshold). Therefore the fund protects non-GM farmers from possible loss of profit on the one hand, and GM farmers complying with the rules but otherwise still causing unavoidable admixture on the other hand, from being held liable for the damage. If a GM farmer does not comply with all the technical coexistence rules, standard civil liability applies: The GM farmer remains individually liable and is held to pay the damage subject to the requirements of Belgian tort law.

A coexistence committee, composed of nine members from the administration, scientific institutions and the agricultural sector, will judge the objections by neighbouring farmers and demands for compensation by the fund by non-GM farmers suffering economic damage.

Moreover, the decree foresees the possibility for the government to confirm GM-free zones. However, a GM-free zone will only be ratified after an official and voluntary request by all farmers cultivating crops in that zone and other preconditions such as the minimal area have been met.

The competent authority is given the right to verify compliance with the legislation and to take control measures by questioning relevant people, inspection of documents and fields and sampling of the crop. It also keeps records of GM crops and fields in a register, partly accessible to the public, in accordance with the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.

It is provided that infringements (non-compliance of the coexistence rules) are penalized with an administrative fine. The penalty rate is proportional to the seriousness of the infringement, ranging from 200 to 1000 Euros and flows to the compensation fund also to be used for reimbursing economic damage.

Finally, the legislation will be evaluated and reported to the Flemish Parliament within two years after its entry into force, and every five years onwards.

Orders of the Flemish Government

For each of the key principles, the decree delegates to the Flemish Government the competence to develop or specify the implementing rules. These rules will be written

down in orders of the Flemish Government, describing in more detail the timing and technical provisions related to the key principles of the decree.

Examples of elements to be captured in the “general” order, containing rules relevant for all crops:

- Technical aspects of the different administrative procedures (notifications, objections and applications for compensation) to be followed by the GM and/or non-GM grower;
- The content of the mandatory training of farmers and contractors;
- The definition of what is accepted as reasonable economic interest;
- The detailed procedural rules for the management of dossiers by the coexistence committee;
- The terms of payment of the contribution to the fund;
- The content and the public nature of the register for record keeping;
- More detailed rules for sampling and analyses.

Examples of elements to be captured in the “crop-specific” order(s), containing rules relevant for that specific crop:

- The timing (deadlines) of the different notifications by the GM grower, related to the growing season of the specific crop in question;
- The amount of the contribution to the fund (per hectare);
- Isolation distance (perimeter) and notification distance;
- Other technical provisions, related to the sowing, planting, treating, harvesting, transporting and/or storage of the GM crop, possibly different for professional and non-professional growers.

Devos (2008) concluded that even in a small region like Flanders, intraregional variations have been proven to be significantly affecting the feasibility to implement isolation perimeters. On the other hand, the government will have to keep an eye on the complexity of the rules to stay reasonable, so that the implementation and supervision of the legislation can be carried out effectively and efficiently.

Today, technical crop-specific measures (isolation distances etc.) are still under discussion on the scientific, administrative as well as on the political level and will be embedded in an order of the Flemish Government together with all other implementing rules, regulating the timing as well as the technical provisions and conditions of the procedure.

These measures will be based on the best available scientific evidence and will be economically proportional. As of today, very few studies have acknowledged that coexistence is only relevant if there are economic incentives for farmers to supply both GM and non-GM maize (Demont & Devos 2008). Economic incentives for coexistence consist either of (i) the adoption of GM maize as a way to capture ‘GM gains’ or (ii) the identity preservation (IP) of non-GM crops as a way to capture ‘IP gains’.

It is expected that the 'general' order and the order for maize will be adopted by the second half of 2010, due to procedural steps to be taken (including the mandatory notification to the European Commission). So the cultivation of GM crops will be covered by legislation as from the growing season of 2011.

Cross-border issues with Wallonia and the Netherlands

Wallonia has, like Flanders, its own regional coexistence legislation in place: a decree and an implementing order, containing, among others, mandatory notification to the government, to neighbouring farmers and to owners of the plot, a contribution to a compensation fund and to administrative and control costs, a detailed publically consultable register of locations, legal prosecution, obligatory cleaning of machinery and isolation distances of 600 meter for maize.

In the Netherlands, in November 2004, a committee of stakeholders presented a compromise proposal on coexistence of GMO, conventional and organic agriculture to the Dutch Minister of Agriculture. The agreement proposes practical measures to ensure coexistence, to limit damage from admixture, ensuring liability and proposes a fund to be filled by all stakeholders (van den Hurk 2005). Since each legislation has its own focus and political background, several differences in approach have the chance to create real problems for the farmers growing crops near the border.

So far, neither Wallonia nor the Netherlands have any experience with large-scale commercial growth of GM crops. However, for both Wallonia and the Netherlands, cross-border discussions have recently started, in the first place to identify possible conflict situations and to search for effective, legal or pragmatic solutions if necessary, without creating any competitive disadvantage to farmers in the vicinity of regional or country borders.

4 Conclusions

In Flanders, the Dutch speaking region of Belgium, coexistence rules have been set in place. The decree of 3 April 2009 contains the framework of the legislation. The key principles are the compulsory training for GM growers and the notification to neighbouring farmers, owners and contractors, the right to object for farmers within the isolation distance, the possibility to be compensated for the economic damage due to admixture with GM product by the fund (within the restrictions as foreseen). Moreover, the decree creates the compensation fund, the coexistence committee for handling objections and applications for compensation of damage and the possibility to accept GM free zones. To maintain the decree, monitoring (including record keeping in a partly publicly accessible register), supervision and controls have been set, with administrative fines should the coexistence measures be violated.

Implementing rules are still to be fixed. Technical and political discussions are ongoing and the adoption of these rules (by way of orders of the Flemish Government) is

expected for the end of 2010. Therefore several procedural legislative steps (such as the notification to the European Commission) have to be taken in the near future.

Flanders, Wallonia and the Netherlands have started technical discussions on possible cross-border issues, trying to identify these problems so that effective and simple solutions can be sought.

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